

In the Drawings:

None

REMARKS

This amendment is in response to the Examiner's Office Action dated 12/14/2004. Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow. Claims 1-44 have been amended for clarification purposes and do not add any new matter. Support for the amendments to the claims can be found in independent claims 1, 17, 31, 37, 40, 43, and 44.

STATUS OF CLAIMS

Claims 1-44 are pending.

Claims 1-9, 12-14, 16-30 and 37-44 stand rejected under 35 USC 103(a) as being unpatentable over Ankireddipally (USP 6772216).

Claims 10, 11, 15 and 31-36 stand rejected under 35 USC 103(a) as being unpatentable over Ankireddipally in view of Murray (USP 5944781).

OVERVIEW OF CLAIMED INVENTION

The presently claimed invention relates to performing remote procedure calls using a markup language as a marshalling format. A client sends a request to a server in the form of a markup language document in a compression format that encodes tags, attributes, and attribute values as tokens rather than strings. As an example, a tag <book> may be given a token 5. A tag may be associated with attributes with a number of different possible values, such as the tag <book> may have “genre” as an attribute that is also given a token 5. Further, attributes may also have associated attribute values, such as attribute “genre” may have an associated value “literature”, that is given a token 129. Thus, the markup document containing a line such as <book genre = “literature”>, would be represented by tokens as 5 5 129.

The server, upon receiving the request from the client, parses the body of the document received, invokes a corresponding method and sends a response back to the client in the same compression format that the request was encoded in. The client first sends a request (via HTTP) to the server to establish a connection. After the connection is established, the client sends further markup language (XML-RPC) requests and receives responses from the server using this connection.

REJECTIONS UNDER 35 USC 103(a)

Claim 1-9, 12-24, 16-30 and 37-44 are rejected under 35 U.S.C. 103(a) as unpatentable by U.S. patent 6,772,216 (Ankireddipally), hereafter Ankireddipally. To be properly rejected under U.S.C. §103(a), each and every element of the claims must be addressed through known prior art or be recognized as an obvious variation thereof. Applicants contend that the Ankireddipally reference fails to provide many of the limitations of applicants' pending claims.

With respect to claim 17, the examiner on page 4 of the office action dated 12/14/2004, states that the Ankireddipally reference does not teach the XML request markup language document being encoded in a tokenized format. Further, the examiner asserts that the XML request markup language document of Ankireddipally reference is encoded in tokenized format because it enables the client to send a message across the network wherein devices are coupled to a token ring.

Applicants respectfully disagree with the examiner's assertion because the applicants' pending application discusses the representing of a markup language document in a compression format that encodes tags, attributes and attribute values as tokens. Having devices coupled to a token ring in a network does not render obvious the encoding of the markup language document in tokenized format because for communication with a device coupled to a token ring, it is not

necessary to encode the tags, attributes and attribute values in a markup language document as tokens. Claim 17 of applicants' pending application relates to a system for performing remote procedure calls wherein client sends a request to a server in the form of a request markup language document that is encoded in tokenized format.

The examiner has cited column 7, lines 9-12 of the Ankireddipally reference as providing for the limitation of performing remote procedure calls utilizing a markup language as a marshaling format. The examiner has also cited column 18, lines 9-14 of the Ankireddipally reference as providing for the limitation of a server receiving a request for a remote procedure call including method name and associated parameters and column 16, line 16 as providing the limitation of a request markup language document. The Ankireddipally reference discusses application-to-application interaction in a distributed computer network, however, conspicuously absent from the citations and the Ankireddipally reference in its entirety is a system for performing 'remote procedure calls'.

Claim 17 requires that request for remote procedure call including method name and parameters is received by a server in the form of a request markup language document encoded in tokenized format. However, the Ankireddipally reference provides no recitation or suggestion of remote procedure calls or markup language document encoded in tokenized format. Hence, applicant contends that independent claim 17 is not rendered obvious by the Ankireddipally reference.

Applicants wish to state that the arguments presented above with respect to independent claim 17 substantially apply to dependent claims 18-30 as they inherit the limitations of the claim from which they depend. Specifically, the Ankireddipally reference does not specifically provide for a markup language document being transmitted as a body of a HTTP-POST message as required by dependent claim 19 of the applicants' invention. With regard to dependent claim

22, the examiner erroneously cites XML/DOM 52 as an event based API. An event-based API reports parsing events (such as the start and end of elements) through callbacks, and does not usually build an internal tree. The Document Object Model (DOM) working group at the World-Wide Web Consortium (W3C) maintains a recommended tree-based API for XML and HTML documents. The Ankireddipally reference does not suggest or render obvious the parser implementing an event based API. Also, dependent claim 23 of the applicants' invention requires the token of the tokenized response document to be translated into strings. The examiner cites column 15, lines 19-24 of the Ankireddipally reference as providing for such limitation. However, the citations merely suggest the parsing of XML document by an XML/DOM module. Conspicuously absent from the citations is the translation of tokens of tokenized response document into strings. Furthermore, the Ankireddipally reference also does not provide for the limitations of dependent claim 24 which requires the translation of tokens into strings using a code space generated offline. Column 24, lines 16-38 of the Ankireddipally reference merely provide for parsing instructions. The examiner has erroneously equated the codespace of applicants' invention which refers to the tag, attribute and value code spaces with parsing instructions of the Ankireddipally reference. The Ankireddipally reference also fails to provide for the limitation of dependent claim 25 wherein the parser represents the response document as tokens.

With respect to claim 1, the examiner on page 7 of the office action, states that claim 1 stands rejected for the same reasons as claim 17. The arguments set forth by the applicants with respect to claim 17 also apply to claim 1, since claim 1 also requires that request for remote procedure call including method name and parameters be generated by client and received by a server in the form of a request markup language document encoded in tokenized format and a response markup language document be generated by the server in a tokenized format.

However, the Ankireddipally reference provides no recitation or suggestion of remote procedure calls or markup language document encoded in tokenized format. Hence, applicants contend that independent claim 1 is not rendered obvious by the Ankireddipally reference.

Applicants wish to state that the arguments presented above with respect to independent claim 1 substantially apply to dependent claims 2-16 as they inherit the limitations of the claim from which they depend. Furthermore with respect to dependent claims 2, 3, 4, 5, and 14 arguments applied to dependent claims 22, 23, 24, 25 and 19 above substantially apply to dependent claims 2, 3, 4, 5, and 14.

Examiner on page 8 of the office action states that claims 37-39 are method claims of 1, 20 and 19 respectively and are rejected for the same reasons. The arguments set forth by the applicants with respect to claim 17 and claim 1 also apply to claim 37, since claim 37 also requires that request for remote procedure call including method name and parameters is generated by the client in the form of a request markup language document encoded in tokenized format. However, the Ankireddipally reference provides no recitation or suggestion of remote procedure calls or markup language document encoded in tokenized format. Hence, applicants contend that independent claim 37 is not rendered obvious by the Ankireddipally reference.

Applicants wish to state that arguments presented above with respect to independent claim 37 substantially apply to dependent claims 38-39 as they inherit the limitations of the claim from which they depend.

The examiner on page 9 of the office action, states that claim 40 is the method claim of claims 17 and 21. Hence, the arguments set forth by the applicants for claims 17 and 21 substantially apply to claim 40 of applicants' invention. Thus, applicants contend that independent claim 40 is not rendered obvious by the Ankireddipally reference.

Applicants wish to state that the arguments presented above with respect to independent claim 40 substantially apply to dependent claims 41-42 as they inherit the limitations of the claim from which they depend.

The examiner on page 9 of the office action, states that claim 43 is a computer product claim of claim 1. Hence, the arguments set forth by the applicants for claim 1 substantially apply to claim 43 of the applicants' invention. Thus, applicants contend that independent claim 43 is not rendered obvious by the Ankireddipally reference.

The examiner on page 9 of the office action, states that claim 44 is a computer product claim of claims 17 and 21. Hence, the arguments set forth by the applicants for claims 17 and 21 substantially apply to claim 44 of the applicants' invention. Thus, applicants contend that independent claim 44 is not rendered obvious by the Ankireddipally reference.

The examiner on page 9 of the office action, states that claims 10-11, 15 and 31-36 are rejected under 35 U.S.C. 103(a) as unpatentable by U.S. patent 6,772,216 (Ankireddipally), hereafter Ankireddipally in view of U.S patent 5,944,781 (Murray), hereafter Murray. To be properly rejected under U.S.C. §103(a), each and every element of the claims must be addressed through known prior art or be recognized as an obvious variation thereof. Applicants contend that the combination of Ankireddipally and Murray references fail to provide many of the limitations of applicants' pending claims.

In view of dependent claim 10, applicants wish to state that claim 10 is dependent on claim 1 and thus inherits the limitations of claim 1. The Ankireddipally reference and the Murray reference provide no recitations or suggestions of remote procedure calls or markup language document encoded in tokenized format. Hence, the arguments set forth by the applicants for claim 1 substantially apply to dependent claim 10 of the applicants' invention. Thus, the

applicants contend that claim 10 is not rendered obvious by the combination of Ankireddipally and Murray references. Specifically, the examiner cites column 4, lines 58-62 of the Murray reference as providing for the limitation of references to handler objects and associated methods stored in a hash table. However, upon closer reading of the citations and the Murray reference in its entirety applicants contend that the Murray reference does not provide for the limitations. In column 5, lines 48-51 of the Murray reference, the term “object” is referred to as Java applet and its state. The applicants contend that storing the applet and its state is not the same as storing handler objects and associated methods in the hash table as required by claim 10 of applicants’ invention. Thus, applicants contend that independent claim 10 is not rendered obvious by the Ankireddipally and Murray references.

Applicants wish to state that the arguments presented above with respect to claim 10 substantially apply to dependent claim 11 as it inherits the limitations of the claim from which it depends.

The examiner on page 10 of the office action, states that claim 15 is a system claim of claims 1, 10, 18, and 19. Hence, the arguments set forth by the applicants for claims 1, 10, 18 and 19 substantially apply to claim 15 of applicants’ invention. Thus, applicants contend that independent claim 15 is not rendered obvious by the Ankireddipally and Murray references.

The examiner on page 10 of the office action, states that claim 31 is the system claim of claims 1, 10, 13, and 14. Hence, the arguments set forth by the applicants for claims 1, 10, 13 and 14 substantially apply to claim 31 of applicants’ invention. Thus, applicants contend that claim 31 is not rendered obvious by the combination of Ankireddipally and Murray references.

Applicants wish to state that the arguments presented above with respect to independent claim 31 substantially apply to dependent claim 32-36 as they inherit the limitations of the claim

from which they depend. The applicants wish to state that the Ankireddipally and Murray references do not teach an event based API as required by dependent claims 33 and 35 of applicants' invention.

SUMMARY

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicants' presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

This amendment is being filed with a petition for extension of time. The Commissioner is hereby authorized to charge the petition fee, as well as any deficiencies in the fees provided to Deposit Account No. 12-0010.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicants' representative at the below number.

Respectfully submitted,


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